United Nations S/2006/150

Security Council

Distr.: General
9 March 2006

Original: English

## Letter dated 8 March 2006 from the Secretary-General addressed to the President of the Security Council

I have the honour to convey the communication from the International Atomic Energy Agency (IAEA) dated 8 March 2006, which I received today, regarding the implementation of the Safeguards Agreement between the Islamic Republic of Iran and IAEA (see annex).

I should be grateful if the present letter and its annex could be brought to the attention of the members of the Security Council.

(*Signed*) Kofi A. **Annan**

06-26573 (E) 090306

## Annex

### Letter dated 8 March 2006 from the Director General of the International Atomic Energy Agency addressed to the President of the Security Council

Further to my communication dated 4 February 2006 sent to the President of the Security Council, and in accordance with paragraph 8 of resolution GOV/2006/14, adopted by the International Atomic Energy Agency Board of Governors at its meeting on 4 February 2006, I convey herewith my report to the Board of Governors for its meeting commencing on 6 March 2006 on the implementation of the Treaty on the Non-Proliferation of Nuclear Weapons Safeguards Agreement in the Islamic Republic of Iran (GOV/2006/15, dated 27 February 2006) (see enclosure). I should note that the Board of Governors did not adopt a resolution at its March meeting.

I should be grateful if you would bring the present letter and its enclosure to the attention of all members of the Security Council.

(*Signed*) Mohamed **ElBaradei**

Enclosure

# Implementation of the NPT Safeguards Agreement in the Islamic Republic of Iran

## Report by the Director General of the International Atomic Energy Agency

27 February 2006

1. A meeting of the Board of Governors was held from 2 to 4 February 2006 to discuss the implementation of the Agreement between the Islamic Republic of Iran (hereinafter referred to as Iran) and the Agency for the Application of Safeguards in connection with the Treaty on the Non-Proliferation of Nuclear Weapons.[1] The meeting was called in response to the announcement by Iran of its decision to resume from 9 January 2006 "R&D activities on the peaceful nuclear energy programme which has been suspended as part of its expanded voluntary and non-legally binding suspension."[2]

2. On 4 February 2006, the Board of Governors adopted a resolution (GOV/2006/14) in paragraph 1 of which it, inter alia, underlined that outstanding questions can best be resolved and confidence built in the exclusively peaceful nature or Iran's programme by Iran responding positively to the calls for confidence building measures which the Board has made on Iran, and in this context deemed it necessary for Iran to:

- re-establish full and sustained suspension of all enrichment related and reprocessing activities, including research and development, to be verified by the Agency;
- reconsider the construction of a research reactor moderated by heavy water;
- ratify promptly and implement in full the Additional Protocol;
- pending ratification, continue to act in accordance with the provisions of the Additional Protocol which Iran signed on 18 December 2003;
- implement transparency measures, as requested by the Director General, including in GOV/2006/67, which extend beyond the formal requirements of the Safeguards Agreement

[1] INFCIRC/214

[2] See GOV/INF/2006/11

and Additional Protocol, and include such access to individuals, documentation relating to procurement, dual use equipment, certain military-owned workshops and research and development as the Agency may require in support of its ongoing investigations.

3. As requested by the Board in paragraph 2 of that resolution, on 4 February 2006, the Director General reported to the Security Council of the United Nations that the steps set out in paragraph 1 of the resolution were required of Iran by the Board and reported to the Security Council all IAEA reports and resolutions, as adopted, relating to this issue.

4. In paragraph 8 of GOV/2006/14, the Board also requested the Director General to report on the implementation of that resolution, and previous resolutions, to the next regular session of the Board, for its consideration, and immediately thereafter to convey, together with any resolution from the March Board, that report to the Security Council.

5. This report is being submitted to the Board in response to its request in paragraph 8 of GOV/2006/14.[3] It provides an update on the developments that have taken place since November 2005, and an update of the Agency's September 2005 overall assessment, in connection with the implementation of the NPT Safeguards Agreement in Iran and on the Agency's verification of Iran's voluntary suspension of enrichment related and reprocessing activities.

# A. Developments since November 2005

## A.1. Enrichment Programme

6. As detailed in the Director General's report of 18 November 2005 (GOV/2005/87), during meetings that took place in October and November 2005, the Agency requested Iran to provide additional information on certain aspects of its enrichment programme. Responses to some of these requests were provided during discussions held in Tehran from 25 to 29 January 2006 between Iranian officials and an Agency team headed by the Deputy Director General for Safeguards (DDG-SG). Another Agency team visited Iran from 12 to 14 February 2006 to further discuss, inter alia, the outstanding issues related to both uranium enrichment and the plutonium experiments. On 26 February 2006, the DDG-SG visited Iran again to discuss with Iranian authorities issues related to the Physics Research Centre (PHRC) and the so-called Green Salt Project (see paras 33–39 below).

### A.1.1. Contamination

7. As part of its assessment of the correctness and completeness of Iran's declarations concerning its enrichment activities, the Agency is continuing to investigate the source(s) of low enriched uranium

[3] The initial report to the Board of Governors on this matter was provided by the Director General orally at the Board's meeting on 17 March 2003. The Director General has since then submitted 16 written reports to the Board: GOV/2003/40, dated 6 June 2003; GOV/2003/63, dated 26 August 2003; GOV/2003/75, dated 10 November 2003; GOV/2004/11, dated 24 February 2004; GOV/2004/34, dated 1 June 2004, and Corr.1, dated 18 June 2004; GOV/2004/60, dated 1 September 2004; GOV/2004/83, dated 15 November 2004; INFCIRC/648, dated 1 August 2005; GOV/2005/61, dated 8 August 2005; GOV/2005/62, dated 10 August 2005; GOV/2005/67, dated 2 September 2005; GOV/INF/2005/13, dated 2 November 2005; GOV/2005/87, dated 18 November 2005; GOV/2006/1, dated 3 January 2006; GOV/2006/2, dated 10 January 2006; and GOV/INF/2006/3, dated 6 February 2006. In addition, the Deputy Director General for Safeguards made oral statements to the Board on 1 March 2005 (GOV/OR.1119), 16 June 2005 (GOV/OR.1130) and 2 February 2004.

(LEU) particles, and some high enriched uranium (HEU) particles, which were found at locations where Iran has declared that centrifuge components had been manufactured, used and/or stored.[4]

8. As reported by the Director General in November 2005,[5] the analysis of the environmental samples collected at a location in a Member State where, according to Iran, the centrifuge components had been stored by the procurement network in the mid-1990s prior to their shipment to Iran, did not indicate any traces of nuclear material. This could be explained, for example, by the fact that the storage locations had changed ownership and been renovated over the past decade, and the components had mainly been stored in their original packing.

9. To further understand the source of some of the contamination found in Iran, the Agency sampled in December 2005 a centrifuge which had been received by a Member State from the procurement network. The results of the analysis of those samples, together with earlier findings,[6] tend, on balance, to support Iran's statement about the foreign origin of most of the HEU contamination. However, the origin of some HEU particles, and of the LEU particles, remains to be further investigated. The Agency is awaiting additional information from another Member State from which contaminated components originated.

10. Due to the fact that it is difficult to establish a definitive conclusion with respect to the origin of all of the contamination, it is essential to make progress on the scope and chronology of Iran's experiments with $UF_6$ in its centrifuge enrichment programme.

### A.1.2. Acquisition of P-1 centrifuge technology

11. As previously reported to the Board,[7] the Agency was shown by Iran in January 2005 a copy of a handwritten one-page document reflecting an offer said to have been made to Iran in 1987 by a foreign intermediary. The document concerned the possible supply of a disassembled centrifuge (including drawings, descriptions and specifications for the production of centrifuges); drawings, specifications and calculations for a "complete plant"; and materials for 2000 centrifuge machines. The document also made reference to: auxiliary vacuum and electric drive equipment; a complete set of workshop equipment for mechanical, electrical and electronic support; and uranium re-conversion and casting capabilities. Iran has declined the Agency's request for a copy of the one-page document.

12. On 25 January 2006, Iran reiterated that that document was the only remaining documentary evidence relevant to the scope and content of the 1987 offer, attributing this to the secret nature of the programme and the management style of the Atomic Energy Organization of Iran (AEOI) at that time. Iran stated that no other written evidence exists, such as meeting minutes, administrative documents, reports, personal notebooks or the like, to substantiate its statements concerning that offer.

13. Iran has maintained that only some components of one or two disassembled centrifuges, and supporting drawings and specifications, were delivered by the network, but that a number of other items of equipment referred to in the document were purchased directly from other suppliers.[8]

14. During the Agency's visit to Iran between 12 and 14 February 2006, Iran provided some clarification of supporting documentation previously shown to the Agency concerning items procured

---

[4] GOV/2005/67, paras 9–12.

[5] GOV/2005/87, para. 3.

[6] GOV/2005/67, para. 12.

[7] GOV/2005/67, para. 14.

[8] GOV/2005/87, paras 5–6.

by Iran. Iran also showed the Agency delivery documents for most of the items said to have been purchased directly by Iran from other suppliers, which tend to confirm the Iranian statement concerning its acquisition of those items.

15. As previously reported to the Board,[9] according to Iran, there were no contacts by Iran with the network between 1987 and mid-1993. Statements made by Iran and key members of the network about the events leading to the mid-1990s offer are still at variance with each other. In this context, Iran has been requested to provide further clarification of the timing and purpose of certain trips taken by AEOI staff members in the mid-1990s.

16. Iran has said it is unable to supply any documentation or other information about the meetings that led to the acquisition of 500 sets of P-1 centrifuge components in the mid-1990s. The Agency is still awaiting clarification of the dates and contents of the shipments.

17. During the Agency's 12–14 February 2006 visit to Iran, no additional information related to the timing of the mid-1990s trips, or to the chronology or contents of the shipments, was made available by Iran. Iran agreed, however, to provide the Agency with further clarifications in writing regarding the latter issue.

### A.1.3. Acquisition of P-2 centrifuge technology

18. Iran still maintains that, as a result of the discussions held with the intermediaries in the mid-1990s, the intermediaries supplied only drawings for P-2 components containing no supporting specifications, and that no P-2 components were delivered by the intermediaries along with the drawings or thereafter. Iran continues to assert that no work was carried out on P-2 centrifuges during the period 1995 to 2002, and that at no time during this period did it ever discuss with the intermediaries the P-2 centrifuge design, or the possible supply of P-2 centrifuge components. In light of information available to the Agency indicating the possible delivery of such components during that period, which information was shared with Iran, Iran was asked in November 2005 to check again whether any deliveries of P-1 or P-2 components had been made after 1995. Iran reiterated to the Agency during its 12–14 February 2006 visit that there had been no such deliveries after 1995.

19. In connection with the research and development (R&D) work on a modified P-2 design, said by Iran to have been carried out by a contracting company between early 2002 and July 2003, Iran has confirmed that the contractor had made enquiries about, and purchased, magnets suitable for the P-2 centrifuge design. During the Agency's mid-February 2006 visit, Iran provided some additional clarification about the types of P-2 magnets it had received, but maintained that only a limited number of magnets had been delivered. In response to Agency questioning about Iran's inquiries into the delivery of larger quantities of magnets (900 pieces) from a foreign entity in mid-2003, Iran stated that it had never ordered or received such magnets. The Agency is still awaiting clarification of all of Iran's efforts to acquire such magnets.

## A.2. Uranium Metal

20. As reported to the Board in the Director General's report of November 2005,[10] among the documents shown by Iran to the Agency, said to have been the centrifuge enrichment related drawings, specifications and supporting documentation provided by the intermediaries, was a 15-page document describing the procedures for the reduction of $UF_6$ to uranium metal in small quantities, and

[9] GOV/2005/87, para. 11.

[10] GOV/2005/87, para. 5.

for the casting of enriched and depleted uranium metal into hemispheres, related to the fabrication of nuclear weapon components. It did not, however, include dimensions or other specifications for machined pieces for such components. According to Iran, this document was provided on the initiative of the network, and not at the request of the AEOI, but it is not able to establish when Iran received the document. Iran has declined the Agency's request to provide it with a copy of the document, but did permit the Agency, during its visit in January 2006, to examine the document again and to place it under Agency seal. During the visit in mid-February 2006, the Agency again requested a copy of the document in order for the Agency to complete its assessment of the document, which Iran again declined to provide.

21. As described in the Director General's report of November 2004, during the period between 1995 and 2000, Iran conducted a series of experiments to produce uranium metal from $UF_4$.[11] Based on the results of the Agency's investigations, it appears that Iran's motivation for conducting uranium reduction experiments was initially to make uranium metal for its laser programme and, later, to develop an alternative process for the Uranium Conversion Facility (UCF).[12] While Iran also made a few simple attempts at casting and machining, neither these nor the reduction experiments appear to have followed the procedures outlined in the 15-page document referred to above.

22. Although there is no indication about the actual use of the document, its existence in Iran is a matter of concern. It is related to uranium re-conversion and casting which was part of the original 1987 offer by the intermediaries but which was not, according to Iran, pursued. However, the Agency is aware that the intermediaries had this document, as well as other similar documents, which the Agency has seen in another Member State. Therefore, it is essential to understand the full scope of the offer made by the network in 1987.

## A.3. Plutonium Experiments

23. As indicated earlier,[13] the Agency has been following up with Iran information provided by Iran concerning its plutonium separation experiments.

24. In order to clarify differences between findings by the Agency and statements made by Iran, a number of plutonium discs were brought by the Agency to Vienna for further analysis to determine the exact isotopic composition of the plutonium. The Agency's analysis showed, in particular, that the Pu-240 content measured on eight of the discs was significantly lower than the Pu-240 content of the solution from which the plutonium deposited on the discs was said to have originated.

25. In August 2005, the Agency also conducted detailed verification of unprocessed irradiated $UO_2$ targets stored in containers in Iran. The results of these non-destructive and destructive analysis measurements indicate that the duration of irradiation was longer than the duration derived from the irradiation parameters provided by Iran.

26. On 6 February 2006, the Agency provided Iran with a summary report of the results of the Agency's analysis of all data available to it as of that date and requested further clarifications in light

---

[11] GOV/2004/83, paras 13–22.

[12] The Agency has noted in past reports that the role of uranium metal in Iran's nuclear fuel cycle still needed to be fully understood. Iran has told the Agency that its rationale for such work was the use of uranium metal for Iran's possible future Magnox reactors, for the production of radiation shielding, as feed material for its laser enrichment programme, for radiation shielding, and to gain know-how in nuclear material production. The rationale given by Iran for the production of depleted uranium metal was to reduce the storage requirements for depleted $UF_6$. See GOV/2003/40, paras 20 and 34; GOV/2003/63, paras 20–21; GOV/2003/75, para. 25; GOV/2004/11, para. 15; and GOV/2004/83, para. 20.

[13] GOV/2005/67, paras 21–25.

of the above inconsistencies. During its 12–14 February 2006 visit to Iran, the Agency met with Iranian officials to discuss the Agency's findings; in the course of the discussion, Iran agreed to provide such clarifications. In a letter dated 15 February 2006, Iran provided some clarifications in connection with the issue referred to in paragraph 25 above, which the Agency is now assessing.

## A.4. Other Implementation Issues

27. There are no new developments to report with respect to Iran's uranium mining activities[14] or with respect to Iran's activities involving polonium and beryllium,[15] which the Agency is still assessing.

28. On 19 February 2006, the Agency visited the Iran Nuclear Research Reactor (IR-40) at Arak to carry out design information verification, and confirmed that the civil engineering work was still ongoing. However, according to Iran, the commissioning date for the reactor is likely to be postponed until 2011.

29. On 9 October 2005, the Agency also carried out a design information verification visit at the Fuel Manufacturing Plant (FMP) at Esfahan. The civil engineering construction of the plant is ongoing; however, the Agency was informed that the commissioning date of 2007, as indicated in the design information provided by Iran, was likely to be postponed.

## A.5. Voluntary Implementation of the Additional Protocol

30. Iran has continued to facilitate access under its Safeguards Agreement as requested by the Agency and, until 6 February 2006, implemented the Additional Protocol as if it were in force, including by providing, in a timely manner, the requisite declarations and access to locations. Since November 2005, the Agency has conducted complementary access at three locations.

31. On 6 February 2006, Iran informed the Agency, inter alia, that:[16]

> "1. As stipulated in Para 7 of INFCIRC/666, from the date of this letter, our commitment on implementing safeguards measures will only be based on the NPT Safeguards Agreement between the Islamic Republic of Iran and the Agency (INFCIRC/214).
>
> 2. From the date of this letter, all voluntarily suspended non-legally binding measures including the provisions of the Additional Protocol and even beyond that will be suspended.
>
> Therefore based on the above mentioned, it is requested the following measures be taken by the Agency:
>
> a. The Agency's inspector presence in the Islamic Republic of Iran for the verification activities should be scheduled only on the basis of the Safeguards Agreement.
>
> b. All the Agency's containment and surveillance measures which were in place beyond the normal Agency safeguards measures should be removed by mid February 2006.

[14] GOV/2005/67, paras 26–31.

[15] GOV/2005/67, para. 34.

[16] GOV/INF/2006/3.

c. From now on, the regular channels of communication (code 1.1 of the Subsidiary Arrangement) should only be through the Permanent Mission of the Islamic Republic of Iran to the IAEA in Vienna."

## A.6. Transparency Visits and Discussions

32. On 1 November 2005, the Agency was given access to a military site at Parchin where several environmental samples were taken.[17] The Agency did not observe any unusual activities in the buildings visited, and the results of the analysis of environmental samples did not indicate the presence of nuclear material at those locations.

33. Since 2004, the Agency has been awaiting additional information and clarifications related to efforts made by the PHRC, which had been established at Lavisan-Shian,[18] to acquire dual use materials and equipment that could be used in uranium enrichment and conversion activities. The Agency also requested interviews with the individuals involved in the acquisition of those items, including the former Head of the PHRC.

34. In that connection, on 26 January 2006, Iran presented to the Agency documentation on efforts by Iran, which it has stated were unsuccessful, to acquire a number of specific dual use items (electric drive equipment, power supply equipment and laser equipment, including a dye laser). Iran stated that, although the documentation suggested the involvement of the PHRC, the equipment had actually been intended for a laboratory at a technical university where the Head of the PHRC worked as a professor. Iran declined to make him available to the Agency for an interview. The Secretariat reiterated its request to interview the professor, explaining that it was essential for a better understanding of the envisioned and actual use of the equipment in question, as well as other equipment that could be relevant to uranium enrichment (balancing machines, mass spectrometers, magnets and fluorine handling equipment).

35. As indicated by the DDG-SG in his February 2006 statement to the Board, in January 2006, the Agency presented to Iran a list of high vacuum equipment purchased by the PHRC, and asked to see the equipment in situ, and to be permitted to take environmental samples from it. Some of the equipment on the Agency's list was presented to the Agency at a technical university, and environmental samples were taken from it, the results of which are still pending. The Agency subsequently wrote to Iran requesting additional clarifications regarding the procurement efforts of the PHRC and the relationship between the PHRC and the technical university. During the Agency's visit in mid-February 2006, Iran declined to discuss this matter further.

36. On 26 February 2006, the Agency met in Iran with the former Head of the PHRC, referred to above. He stated that the electronic drive equipment, the power supply equipment, the laser equipment and the vacuum equipment had been used for R&D in various departments of the university. The professor explained that his expertise and connections, as well as resources available at his office in the PHRC, had been used for the procurement of equipment for the technical university. He was not aware, however, of the type of research in which other professors at the university were engaged. To the best of his knowledge, the vacuum equipment referred to above had been ordered for the physics department of the university. In this connection, Iran stated that this equipment had been used for vacuum coating, and was currently being utilized for nano technology applications. The Agency is

[17] GOV/2005/87, para. 16.

[18] According to Iran, the PHRC was established at Lavisan-Shian in 1989, inter alia, to "support and provide scientific advice and services to the Ministry of Defence" (see GOV/2004/60, para. 43).

assessing this information. Iran also agreed to provide the requested clarifications in relation to the balancing machines, mass spectrometers, magnets and fluorine handling equipment.

37. As also indicated by the DDG-SG in his February 2006 statement to the Board, in January 2006, Iran provided additional clarification of its efforts in 2000 to procure some other dual use material (high strength aluminium, special steel, titanium and special oils), as had been discussed in January 2005. High strength aluminium was presented to the Agency, and environmental samples were taken therefrom. Iran stated that the material had been acquired for aircraft manufacturing, but that it had not been used because of its specifications. Iran agreed to provide additional information on inquiries concerning the purchase of special steels, titanium and special oils. Iran also presented information on Iran's acquisition of corrosion resistant steel, valves and filters, which were made available to the Agency on 31 January 2006 for environmental sampling. The results of the environmental samples are still pending.

38. On 5 December 2005, the Secretariat repeated its request for a meeting to discuss information that had been made available to the Secretariat about alleged studies, known as the Green Salt Project, concerning the conversion of uranium dioxide into $UF_4$ (often referred to as "green salt"), as well as tests related to high explosives and the design of a missile re-entry vehicle, all of which could involve nuclear material and which appear to have administrative interconnections. On 16 December 2005, Iran replied that the "issues related to baseless allegations." Iran agreed on 23 January 2006 to a meeting with the DDG-SG for the clarification of the alleged Green Salt Project, but declined to address the other topics during that meeting. In the course of the meeting, which took place on 27 January 2006, the Agency presented for Iran's review a copy of a process flow diagram related to bench scale conversion and a number of communications related to the project. Iran reiterated that all national nuclear projects are conducted by the AEOI, that the allegations were baseless and that it would provide further clarifications later.

39. On 26 February 2006, the DDG-SG met with Iranian authorities to discuss the alleged Green Salt Project. Iran repeated that the allegations "are based on false and fabricated documents so they were baseless," and that neither such a project nor such studies exist or did exist. It stated that all national efforts had been devoted to the UCF project, and that it would not make sense to develop indigenous capabilities to produce $UF_4$ when such technology had already been acquired from abroad. According to information provided earlier by Iran, the company alleged to have been associated with the so-called Green Salt Project had, however, been involved in procurement for UCF and in the design and construction of the Gchine ore processing plant.

40. The Agency is assessing this and other information available to it, and is waiting for Iran to address the other topics which could have a military nuclear dimension, as mentioned above.

## A.7. Suspension

41. In a letter dated 3 January 2006, Iran informed the Agency that it had decided to resume, as from 9 January 2006, "those R&D on the peaceful nuclear energy programme which ha[d] been suspended as part of its expanded voluntary and non-legally binding suspension".[19] On 7 January 2006, the Agency received a letter from Iran requesting that the Agency remove seals applied at Natanz, Farayand Technique and Pars Trash for the monitoring of suspension of enrichment related

[19] GOV/INF/2006/1.

activities.[20] The seals were removed by Iran on 10 and 11 January 2006 in the presence of Agency inspectors.

42. Since the removal of the seals, Iran has begun substantial renovation of the gas handling system at the Pilot Fuel Enrichment Plant (PFEP) at Natanz. Iran has also informed the Agency that quality control of components, and some rotor testing, was being carried out at Farayand Technique and at Natanz. Due to the fact that no centrifuge related raw materials and components are under Agency seal, the Agency is unable effectively to monitor the R&D activities being carried out by Iran except at PFEP, where containment and surveillance measures are being applied to the enrichment process. On 29 January 2006, the two cylinders at PFEP containing $UF_6$ from which seals had been removed on 10 January 2006 were again placed under Agency containment and surveillance.

43. On 8 February 2006, updated design information for PFEP and for the Fuel Enrichment Plant (FEP) were received by the Agency. Equipment such as process tanks and an autoclave are currently being moved into the FEP; commencement of the installation of the first 3000 P-1 machines at FEP is planned for the fourth quarter of 2006.

44. On 11 February 2006, Iran started enrichment tests by feeding a single P-1 machine with $UF_6$ gas. At that time, other single P-1 machines were ready for operation and a 10-machine cascade was undergoing vacuum tests. The feeding of the 10-machine cascade was begun on 15 February 2006, and, on 22 February 2006, a 20-machine cascade was subjected to vacuum testing. The enrichment process at PFEP is covered by Agency safeguards containment and surveillance measures.

45. In the letter received from Iran on 6 February 2006, referred to in paragraph 31 above, Iran stated, inter alia, that the implementation of safeguards measures would only be based on its NPT Safeguards Agreement and requested that "[a]ll the Agency's containment and surveillance measures which were in place beyond the normal Agency safeguards measures should be removed by mid February 2006."[21] Accordingly, on 12 February 2006, the Agency modified the containment and surveillance measures at UCF. The $UF_6$ filling stations, all filled $UF_6$ cylinders and all $UF_6$ produced at UCF, however, remain under Agency safeguards containment and surveillance measures. The uranium conversion campaign which was begun at UCF in November 2005 is continuing and is now expected to end in April 2006. Since September 2005, approximately 85 metric tons of $UF_6$ has been produced at UCF.

## B. Current overall assessment

46. A detailed overall assessment of Iran's nuclear programme and the Agency's efforts to verify Iran's declarations with respect to that programme was provided by the Director General in November 2004[22] and again in September 2005.[23] As indicated in those reports, Iran has made substantial efforts over the past two decades to master an independent nuclear fuel cycle, and, to that end, has conducted experiments to acquire the know-how for almost every aspect of the fuel cycle. Many aspects of Iran's nuclear fuel cycle activities and experiments, particularly in the areas of uranium enrichment, uranium conversion and plutonium research, had not been declared to the Agency in accordance with Iran's

[20] GOV/INF/2006/2.

[21] GOV/INF/2006/3.

[22] GOV/2004/83, paras 106–114.

[23] GOV/2005/67, paras 42–52.

obligations under its Safeguards Agreement. Iran's policy of concealment continued until October 2003, and resulted in many breaches of its obligation to comply with that Agreement, as summarized in the Director General's report of September 2005.[24]

47. Since October 2003, Iran has taken corrective actions with respect to those breaches. The Agency has been able to confirm certain aspects of Iran's current declarations, in particular in connection with uranium conversion activities, laser enrichment, fuel fabrication and the heavy water research reactor programme, which the Agency has been following up as routine implementation matters under Iran's Safeguards Agreement and, until 6 February 2006, its Additional Protocol.

48. Two important issues were identified in the Director General's November 2004 report as relevant to the Agency's efforts to provide assurance that there are no undeclared enrichment activities in Iran, specifically: the origin of LEU and HEU particle contamination found at various locations in Iran; and the extent of Iran's efforts to import, manufacture and use centrifuges of both the P-1 and P-2 designs.

49. With respect to the first issue — contamination — as indicated above, based on the information currently available to the Agency, the results of the environmental sample analysis tend, on balance, to support Iran's statement about the foreign origin of most of the observed HEU contamination. It is still not possible at this time, however, to establish a definitive conclusion with respect to all of the contamination, particularly the LEU contamination. This underscores the importance of additional information on the scope and chronology of Iran's P-1 and P-2 centrifuge programmes, which could greatly contribute to the resolution of the remaining contamination issues.

50. With respect to the second issue — the P-1 and P-2 centrifuge programmes — although some progress has been made since November 2004 in the verification of statements by Iran regarding the chronology of its centrifuge enrichment programme, the Agency has not yet been able to verify the correctness and completeness of Iran's statements concerning those programmes. While Iran has provided further clarifications, and access to additional documentation, concerning the 1987 and mid-1990s offers related to the P-1 design, the Agency's investigation of the supply network indicates that Iran should have additional supporting information that could be useful in this regard. Iran has also been asked to provide additional details on the process that led to Iran's decision in 1985 to pursue centrifuge enrichment and on the steps leading to its acquisition of centrifuge enrichment technology in 1987. However, Iran maintains that no information, other than that already provided to the Agency, exists.

51. No additional information or documentation has been provided with respect to Iran's statement that it did not pursue any work on the P-2 design between 1995 and 2002. As indicated above, Iran has been requested to search for more information, and any supporting documentation, relevant to the P-2 programme, in particular with regard to the scope of the original offer in connection with the P-2 centrifuge design and Iran's acquisition of items linked to that programme. Iran, however, maintains that no such information exists.

52. The Agency continues to follow up on all information pertaining to Iran's nuclear programme and activities. Although absent some nexus to nuclear material the Agency's legal authority to pursue the verification of possible nuclear weapons related activity is limited, the Agency has continued to seek Iran's cooperation as a matter of transparency in following up on reports related to equipment, materials and activities which have applications both in the conventional military area and in the civilian sphere as well as in the nuclear military area. In this regard, Iran has permitted the Agency to visit defence related sites at Kolahdouz, Lavisan and Parchin. The Agency did not observe any

[24] GOV/2005/67, paras 4–8.

unusual activities in the buildings visited at Kolahdouz and Parchin, and the results of environmental sampling did not indicate the presence of nuclear material at those locations. The Agency is still assessing the available information, and awaiting other additional information, in relation to the Lavisan site and the PHRC.

53. As indicated to the Board in November 2004, and again in September 2005, all the declared nuclear material in Iran has been accounted for. Although the Agency has not seen any diversion of nuclear material to nuclear weapons or other nuclear explosive devices, the Agency is not at this point in time in a position to conclude that there are no undeclared nuclear materials or activities in Iran. The process of drawing such a conclusion, under normal circumstances, is a time consuming process even with an Additional Protocol in force. In the case of Iran, this conclusion can be expected to take even longer in light of the undeclared nature of Iran's past nuclear programme, and in particular because of the inadequacy of information available on its centrifuge enrichment programme, the existence of a generic document related to the fabrication of nuclear weapon components, and the lack of clarification about the role of the military in Iran's nuclear programme, including, as mentioned above, about recent information available to the Agency concerning alleged weapon studies that could involve nuclear material.

54. It is regrettable, and a matter of concern, that the above uncertainties related to the scope and nature of Iran's nuclear programme have not been clarified after three years of intensive Agency verification. In order to clarify these uncertainties, Iran's full transparency is still essential. Without full transparency that extends beyond the formal legal requirements of the Safeguards Agreement and Additional Protocol — transparency that could only be achieved through Iran's active cooperation — the Agency's ability to reconstruct the history of Iran's past programme and to verify the correctness and completeness of the statements made by Iran, particularly with regard to its centrifuge enrichment programme, will be limited, and questions about the past and current direction of Iran's nuclear programme will continue to be raised. Such transparency should primarily include access to, and cooperation by, relevant individuals; access to documentation related to procurement and dual use equipment; and access to certain military owned workshops and R&D locations that the Agency may need to visit in the future as part of its investigation.

55. The Agency will pursue its investigation of all remaining outstanding issues relevant to Iran's nuclear programme, and the Director General will continue to report to the Board as appropriate.